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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,456	05/19/2005	Marten Johansson	BGEE 2 00113	4290
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FAY SHARPE LLP 1100 SUPERIOR AVENUE, SEVENTH FLOOR CLEVELAND, OH 44114			EXAMINER FERGUSON, MICHAEL P	
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			10/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/535,456	<b>Applicant(s)</b> JOHANSSON ET AL.	
	<b>Examiner</b> Michael P. Ferguson	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-10 and 14-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-10 and 14-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1, 10, 20 and 26 are objected to because of the following informalities:

Claim 1 (line 8) recites "in positioned". It should recite --in position--.

Claim 10 (line 2) recites "flange connection". It should recite --flanged connection--.

Claim 10 (line 6) recites "joining together of". It should recite --joining together--.

Claim 10 (line 9) recites "lower flange designed to be secured". It should recite --lower flange half are secured--.

Claim 20 (line 1) recites "flange connection". It should recite --flanged connection--.

Claim 26 (line 2) recites "lower flange are". It should recite --lower flange half are--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Manton (US 3,652,110).

As to claim 1, Manton discloses flanged connection capable of fixing a gas-filled spring in a machine tool, the flanged connection comprising an upper flange half **12** and a lower flange half **12**, a fixing element **13**, and a locking ring **28**, the upper flange half and the lower flange half each include a through-opening capable of securing a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1) by at least partial insertion into a groove **29** of complementary design around the gas-filled spring while being fixed in position between the upper flange half and the lower flange half, the fixing element designed to apply a clamping force on the locking ring that is positioned at least partially around the gas-filled spring when the upper flange half and the lower flange half are designed to be secured together, the locking ring and the fixing element are at least two separate components, the fixing element designed to apply a contact force against the locking ring when the upper flange half and the lower flange half are designed to be secured together (Figures 1 and 4).

Examiner notes that neither a gas-filled spring nor a machine tool have been positively claimed as elements of the claimed flanged connection in claim 1; such elements have only been recited as intended use. All that is required of the limitations of claim 1 and its dependent claims is a connection capable of use with such elements. Accordingly, the Manton reference has been interpreted to read on such claims.

As to claim 5, Manton discloses a flanged connection wherein at least one of the flange halves **12** on its inside has a section inclined in relation to the central axis of the flanged connection, the inclined section designed to bring a correspondingly inclined

section on the outside of the fixing element **13** into engagement in order to produce the clamping force (Figures 1 and 4).

As to claim 6, Manton discloses a flanged connection wherein the fixing element **13** has a groove running along its outside and designed to bring a projecting part arranged on the inside of one of the flange halves **12** having the inclined section into engagement (Figure 4).

As to claim 8, Manton discloses a flanged connection wherein the flanged connection is capable of being fitted to a machine tool by at least one fastener **14'**, the fastener designed to generate the clamping force between the fixing element **13** and a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1) and to generate a contact force between the fixing element and the locking ring **28** (Figure 4).

As to claim 9, Manton discloses a flanged connection wherein the clamping force is designed to prevent rotation of a gas-filled spring (constituted by fluid-filled tube **11**; Figure 1).

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19, 20, 23, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manton.

As to claim 19, Manton discloses a flanged connection capable of connecting a spring arrangement having a circular outer body to a machine tool, the flanged connection comprising an upper flange half **12**, a lower flange half **12**, a fixing element **13**, and a locking ring **28**, the upper flange half and the lower flange half each including a through-opening capable of receiving at least a portion of the body of a gas filled spring (constituted by fluid-filled tube **11**; Figure 1), the upper flange half and the lower flange half designed to be secured together, at least one of the flange halves including an inclined section in an inside face that faces the body of the gas-filled spring, the inclined section inclined in relation to a central axis of the flanged connection, the locking ring designed to be at least partially inserted into a groove on an outer surface of the body of the gas-filled spring, the fixing element designed to apply a clamping force on the locking ring that is positioned in the groove on the outer surface of the body of the gas-filled spring when the upper flange half and the lower flange half are secured together, the clamping force designed to at least partially secure the gas-filled spring to the flanged connection and to inhibit movement of the gas-filled spring in the flanged connection, the locking ring and the fixing element are at least two separate components (Figures 1 and 4).

Examiner notes that neither a gas-filled spring nor a machine tool have been positively claimed as elements of the claimed flanged connection in claim 19; such elements have only been recited as intended use. All that is required of the limitations of claim 19 and its dependent claims is a connection capable of use with such elements. Accordingly, the Manton reference has been interpreted to read on such claims.

Manton does not disclose any structural or functional significance as to the specific shape of locking ring, other than that locking ring **28** is secured within annular groove **29** defined between fixing element **13** and fluid-filled tube **11** (column 2 lines 65-75, Figure 4). Manton fails to disclose a flanged connection wherein the locking ring has a generally circular cross-sectional shape.

The applicant is reminded that a change in the shape of a prior art device, wherein there is no structural or functional significance as to the shape of an element disclosed, is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Accordingly, It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection disclosed by Manton wherein the locking ring has a circular cross-section, as Manton does not disclose any structural or functional significance as to the specific shape of locking ring, other than that the locking ring is secured within the groove defined between fixing element and fluid-filled tube, and as such change in shape is a design consideration within the skill of the art.

As to claim 20, Manton discloses a flanged connection wherein he through-opening in at least one of the flange halves **12** is circular (Figure 1).

As to claim 23, Manton disclose a flanged connection wherein the flange halves **12** are connected by at least one fastener **14'** (Figure 1).

As to claim 25, Manton discloses a flanged connection wherein the fixing element **13** only engages the upper flange half **12** when the upper flange half and the lower flange half **12** are secured together (Figure 12).

As to claim 27, Manton disclose a flanged connection wherein the flanged connection includes only one fixing element **13** and only one locking ring **28** (when assembled as shown in Figure 4).

6. Claims 7, 21, 22, 24, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manton in view of Clague (US 3,695,640).

As to claim 7, Manton fails to disclose a flanged connection wherein the fixing element has a recess along its inside designed to receive at least a portion of the locking ring.

Clague teaches a flanged connection wherein a fixing element **24** has a recess **27** along its inside designed to receive at least a portion of a locking ring **14a**; the recess providing positive locking engagement between the fixing element and the locking ring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members (Figure 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection disclosed by Manton wherein the fixing element has a recess receiving the locking ring as taught by Clague in order to provide positive locking engagement between the fixing element and the locking ring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members.

As to claim 21, Manton fails to disclose a flanged connection wherein the fixing element includes a recess, the recess designed to receive at least a portion of the locking ring.



Clague teaches a flanged connection wherein a fixing element **24** has a recess **27** designed to receive at least a portion of a locking ring **14a**; the recess providing positive locking engagement between the fixing element and the locking ring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members (Figure 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection disclosed by Manton wherein the fixing element has a recess receiving the locking ring as taught by Clague in order to provide positive locking engagement between the fixing element and the locking ring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members.

As to claim 22, Manton fails to disclose a flanged connection wherein the fixing element includes a recess, the recess designed to receive at least a portion of the locking ring.

Clague teaches a flanged connection wherein a fixing element **24** has a recess **27** designed to receive at least a portion of a locking ring **14a**; the recess providing positive locking engagement between the fixing element and the locking ring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members (Figure 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection disclosed by Manton wherein the fixing element has a recess receiving the locking ring as taught by Clague in order to provide positive locking engagement

between the fixing element and the locking ring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members.

As to claim 24, Manton discloses a flanged connection wherein the flange halves **12** are connected by at least one fastener **14'** (Figure 1).

As to claim 26, Manton discloses a flanged connection wherein the fixing element **13** only engages the upper flange half when the upper flange half **12** and the lower flange half **12** are secured together (Figure 4).

As to claim 28, Manton discloses a flanged connection wherein the flanged connection includes only one fixing element **13** and only one locking ring **28** (when assembled as shown in Figure 4).

7. Claims 10 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art (Figure 1) in view of Manton.

As to claims 10, 14 and 15, Admitted prior art (Figure 1) discloses a method of fixing a gas-filled spring **1** in a machine tool **2**, by which method an upper flange half **4** and a lower flange half **5** of a flanged connection which can be joined together are fitted at least partially around the gas-filled spring and a locking ring **6** arranged between the flange halves is at least partially fitted around the gas-filled spring in a groove **7** of complementary design and is fixed between the flange halves securing the gas-filled spring (Figure 1).

Admitted prior art fails to disclose a method wherein, when joining together the flange halves, a clamping force is applied around the gas-filled spring by a fixing

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element supplementing the locking ring; the locking ring and the fixing element are at least two separate components; the fixing element designed to apply a contact force against the locking ring when the upper flange half and the lower flange half are secured together; wherein a section inclined in relation to the central axis of the flanged connection on the inside of at least one of the flange halves is brought into engagement with a correspondingly inclined section on the outside of the fixing element, the fixing element being applied around the gas-filled spring with the clamping force and where appropriate being applied against the locking ring with a contact force; and wherein a groove running along the outside of the fixing element is brought into engagement with a projecting part arranged on one of the flange halves having the inclined section.

Manton teaches a clamping method wherein a clamping force applied around a fluid-filled tube 11 by a locking ring 28 arranged between upper and lower flange halves 12 of a flanged connection is supplemented by a fixing element 13, wherein the locking ring and the fixing element are at least two separate components, the fixing element designed to apply a contact force against the locking ring when the upper flange half and the lower flange half are secured together, wherein a section inclined in relation to a central axis of the flanged connection on the inside of at least one of the flange halves is brought into engagement with a correspondingly inclined section on the outside of the fixing element, the fixing element being applied around the fluid-filled tube with the clamping force and where appropriate being applied against the locking ring with a contact force; and wherein a groove running along the outside of the fixing element is brought into engagement with a projecting part arranged on one of the flange halves

having the inclined section; fixing element 13 provides a positive locking engagement between the flanged connection 12 and fluid-filled tube 11, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members (column 2 lines 65-75, Figure 4). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method as disclosed by Admitted prior art to have the clamping force applied by the locking ring supplemented by a fixing element as taught by Manton in order to provide a positive locking engagement between the flanged connection and gas-filled spring, ensuring proper axial alignment and positioning between the members and preventing relative movement between the members.

As to claim 16, Admitted prior art (Figure 1) discloses a method wherein the clamping force is generated when the flanged connection is fitted to the machine tool 2 and that the clamping force is of a predefined magnitude.

As to claim 17, Admitted prior art (Figure 1) discloses a method wherein the magnitude of the clamping force is adjusted by adjusting the tightening torque of fasteners 8 used for fitting the flanged connection to the machine tool 2.

As to claim 18, Admitted prior art (Figure 1) discloses a method wherein the clamping force serves to prevent rotation of the gas-filled spring 1.

### ***Response to Arguments***

8. Applicant's arguments filed July 13, 2007 have been fully considered but they are not persuasive.

As to claims 1 and 10, Attorney argues that:

Manton does not disclose a flanged connection including *a separate locking ring and fixing element, the fixing element applying a contact force against the locking ring when the upper flange half and the lower flange half are secured together.*

Examiner disagrees. As to claims 1 and 10, Manton discloses a flanged connection including a separate locking ring **28** and fixing element **13**, the fixing element applying a contact force against the locking ring when the upper flange half **12** and the lower flange half **12** are secured together (Figures 1 and 4, column 2 lines 65-75).

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF

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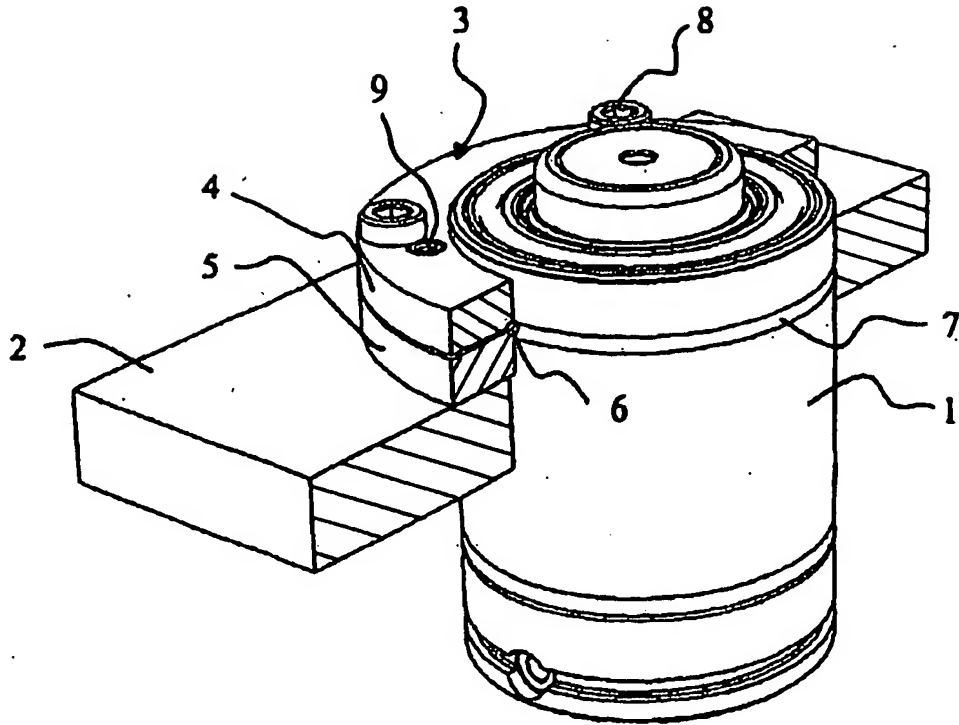
DANIEL P. STODOLA  
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TECHNOLOGY CENTER 3600



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REPLACEMENT SHEET

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Approved.  
MPS  
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**Fig. 1**  
(PRIOR ART)